



*JFW*

Attorney Docket No. 277/023

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re the Application of

Ji-deog KIM, et al.

Art Unit: 2828

Serial No. 10/724,632

Examiner:

Filed: December 2, 2003

Confirmation No. 2006

For: PHOTONIC CRYSTAL-BASED RESONANT  
CAVITY AN RESONATOR

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 C.F.R. §1.56**

Commissioner for Patents  
Alexandria, VA 22313-1450

Sir:

Submitted herewith on Form PTO/SB/08 (or PTO-1449, *modified*) is a listing of a document(s) known to applicant in order to comply with applicant's duty of disclosure pursuant to 37 C.F.R. §1.56.

☐ A copy of each listed document is being submitted to comply with the provisions of 37 C.F.R. §§1.97 & 1.98. [Box checked if applicable.]

☒ A copy of each listed non-U.S. patent and/or patent publication and cited literature is being submitted to comply with the provisions of 37 C.F.R. §§1.97 & 1.98. Cited U.S. patents and patent publications are *not* attached in accordance with the waiver set forth in the Notice by the Deputy Commissioner for Patent Examination Policy dated July 11, 2003, applicable to applications having a U.S. filing date *after* June 30, 2003. [Box checked if applicable.]

\* \* \*

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application. Applicant does not waive any rights to take any action that would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* prior art reference against the claims of the present application.

Where available, copies of English language patent family members of non-English patent documents have been provided. Such submission of English language patent family members is for the convenience of the Office and is not to be construed as an indication that such English language patent family members are literal translations of the non-English patents. Applicant(s) expressly reserve their right to file verified English translations of the non-English patent documents.

☒ The listed document(s) is/are being submitted in compliance with 37 C.F.R. 1.97(b)(3): submission before the mailing date of the first action on the merits. [Box checked if applicable.]

☒ The foregoing document(s) came to applicant's attention during the prosecution of their corresponding European application. ☐ A copy of the EP Search Report is also attached. [Box(es) checked if applicable.]

#### CERTIFICATION

☒ The undersigned hereby certifies in accordance with 37 CFR §1.97(e)(1) that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three (3) months prior to the filing of this Statement. [Box checked if applicable.]

\* \* \*

Applicant respectfully requests that the listed document(s) be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

\* \* \*

#### FEE PAYMENT

- ☐ The fee mandated by 37 C.F.R. §1.17(p) is believed applicable. [Box checked if applicable.]
- ☐ Attached is Form PTO-2038 in payment of this fee (\$180.00). [Box checked if applicable.]
- ☐ This fee may be charged to Deposit Account No. 50-1645. (A duplicate copy of this paper is enclosed.) [Box checked if applicable.]

Respectfully submitted,

January 18, 2005  
Date

  
Eugene M. Lee, Registration No. 32,039

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703.525.0978 TEL  
703.525.4265 FAX

**DEPOSIT ACCOUNT CHARGE AUTHORIZATION**

If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1645.

Any additional fee(s) necessary to effect the proper and timely filing of the above-paper may also be charged to Deposit Account No. 50-1645.

Substitute for form 1449/PTO



*(Use as many sheets as necessary)*

Sheet	1	of	2
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Application Number	10/724,632
Filing Date	December 2, 2003
First Named Inventor	Ji-deog KIM, et al.
Art Unit	2828
Examiner Name	
Attorney Docket Number	277/023

[illegible][illegible]

**Examiner  
Signature**

Date  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.**

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/724,632
				Filing Date	December 2, 2003
				First Named Inventor	Ji-deog KIM, et al.
				Art Unit	2828
				Examiner Name	
Sheet	2	of	3	Attorney Docket Number	277/023

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	2	MALKOVA, et al., *, Phys. Rev. B., Vol. 66, pp. 115113-1 through 115113-11 (26 September 2002)	
		*Entitled: "Symmetrical perturbation analysis of complex two-dimensional photonic crystals"	
	3	SIMEONOV, et al. **, Physica B, Vol. 228, No. 3-4, pp. 245-250 (November 1996)	
		**Entitled: "Photonic band structure of zinc blende type periodic dielectric media"	
	4	VILLENEUVE, et al. ***Entitled, "Physical Review, B. Condensed Matter, 54(11):7837-7842 (9-15-1996)	
		*** "Microcavities in photonic crystals: Mode symmetry, tunability, and coupling efficiency"	
	5	JIN, et al., ****, Optics Communications, Vol. 188, No. 5-6, pp. 255-260 (15 February 2001)	
		*****Entitled: "Microcavities composed of point defects and waveguides in photonic crystals"	
	6	SIGALAS, et al. *****, Proceedings of the SPIE, Vol. 4640, pp. 211-217, (23 January 2002)	
		*****, Entitled: "Add-drop photonic crystal filters"	

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

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Art Unit	2828
Examiner Name	
Attorney Docket Number	277/023

Sheet 3 of 3

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	7	YABLONOVITCH, ***** Physical Review Letters, Vol. 58, No. 20, pp. 2059-2062 (18 May 1987)	
		*****Entitled: "Inhibited spontaneous emission in solid-state physics and electronics"	
	8	CASSAGNE, et al. ***** Physical Review B, Condensed Matter, 53(11), pp. 7134-7142 (15 March 1996)	
		*****Entitled: "Hexagonal photonic-band-gap structures"	

Examiner Signature	Date Considered
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